Michelle Bartolo

Professor Rivas

Software Development I

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Short Essay: Comparing Software Development Processes

Agile Development is a software development methodology that focuses on simplifying code, testing often, and delivering functional bits of the application as soon as they're ready. Through agile development, developers follow a set of principles that value collaborative effort of self-organizing cross-functional teams. It promotes "adaptive planning, evolutionary development, early delivery, and continuous improvement", while encouraging quick and flexible response to change. ("What is Software Development?") Because of its emphasis on simplification and collaboration, there are many advantages to utilizing agile development. Since it easy to respond to change, customers get solutions to imperative problems promptly. It also accepts uncertainty, which allows developers to prioritize discovery and experimentation to drive out uncertainty before fully committing to a solution. This allows there to be less mistakes in the final product. Although there are numerous positives to utilizing agile development, there are also some downsides. There is a great degree of uncertain with agile development, which can make planning releases of final products uncertain and difficult. (Gilley) In addition, since teams of developers using agile development are often small, these individuals must possess a high degree of skill in various disciplines and be skilled on the Agile framework chosen.

Alternatively, one can utilize disparate software development processes. In most software development processes, the same life cycle must be followed. This life cycle includes requirements specification, analysis, design, implementation, testing, deployment, and maintenance. At any stage of this life cycle, the developer may find it necessary to go back to a

previous step in order to ensure that all errors and mistakes are resolved. (Liang 2015) Following these steps are essential to creating a code that runs efficiently and effectively. Although this process is presented in a more organized and rigid manner than Agile development, this can make the process of development a final program take much longer. With this form of development, developers are able to pinpoint when they think a project will be completed; however, it may take longer and be less flexible than agile development. Since there is an increased rigidity, it is difficult to go back and make alterations after the fact.

As a developer, I would prefer to use agile development because the various positives outweigh the negative consequences. Since requirements constantly evolve, it is easy to change various aspect of the project due to shorter planning cycles. In addition, there is a constant emphasis placed on team interaction and communication. I tend to work better and become more successful through collaboration and teamwork. Therefore, constant team involvement and communication that is emphasized through Agile development will make it increasingly possible for productive progress and new discoveries to be made. Lastly, because of the structure of Agile development, I will be able to continuously improve my skills as a developer.

Works Cited

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